Department of Anatomy and Cell Biology Electron Microscopy Center
In honor of the late Dr. V H Gattone, Director of the Electron Microcopy Center

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The Indiana University School of Medicine Electron Microscopy Center is a full service research laboratory providing both Transmission and Scanning Electron Microscopy. The center can provide the technical services to help design and then implement experiments needing either type of microscopy. Free consultation with assistant director/lab manager is provided with any new experiment. The service provided can apply both traditional methods and more recent technical developments to suit the investigator's needs.

The services that are available are:

1) **Transmission Electron Microscopy (TEM).** FEI Tecnai G2 12 Bio Twin (Hillsboro, OR) equipped with an AMT (Advanced Microscopy Techniques, Danvers, MA) CCD camera. Operating system, updated in 2013. Routine processing of specimens, fixation through embedding. Thick and thin sectioning with staining. Viewing and imaging on microscope. Various specimen types accepted, from tissue pieces to cell cultures either as a monolayer or cell pellet. Negative staining can be done on various specimens, such as virus, bacteria, exosomes or even hallosite crystals in clay.

2) **Immunocytochemistry.** This would include processing of specimens with a special fixative and embedding resin used for immunostaining, thick and thin sectioning, the immunostaining process, primary antibody provided by the researcher, secondary antibody provided by the EM Center. Viewing and imaging on the microscope.

3) **Scanning Electron Microscopy (SEM).** JEOL 6390 LV (Peabody, MA).Routine processing of specimens with fixation, critical point or chemical drying, mounting and sputter-coating. Viewing and imaging on the scope.

4) **Field Emission Scanning Electron Microscopy (FE SEM).** JEOL JSM-7800F (Peabody, MA). Brand new for 2014. Extreme high resolution analytical thermal field emission scanning electron microscope, it is a current production state-of-art fourth generation high resolution in-lens gun field emission electron microscope. 1.0nm resolution, at 15KV. Magnification range from 25x-1,000,000x. Routine processing of specimens with fixation, critical point or chemical drying, mounting and carbon coating. Viewing and imaging on the scope.

Fee schedule and contact information available on the website. See below and please feel free to contact Caroline Miller with any questions you have related to electron microscopy.

http://anatomy.iupui.edu/core-facilities/electron-microscopy-center/